

The Stars In The Night Sky



Icebreaker



DEV.105 – Delivering Instruction
Lesson Plan – The Stars in The Night Sky

THE STARS IN THE NIGHT SKY

Stars in the Night Sky

Very Short Lecture

- Have you ever looked up at the night sky from your cottage, your boat, overnight camping, a country farm, or even in the city and asked what do I see or what am I looking at in the dark night sky?
- Have you ever wondered how far those stars are?

Stars in the Night Sky

Very Short Lecture

- Or maybe, have you ever recite that old Nursery Rhyme;

Star Light, Star Bright,
First Star I see tonight,
I wish I may, I wish I might,
Have the wish I wish tonight.

Objects in the Night Sky

- ◉ Many Objects can be seen with the unaided eye.
- ◉ The closest Objects in our Solar System are: Sun, Moon, Planets (Mercury, Venus, Mars, Jupiter & Saturn
- ◉ Comets & Meteors (Falling Stars)
 - Not Meteorites since those rocks have been discovered on the ground
- ◉ Stars – Approximately 5000 on a very dark night

Objects Not in the Night Sky Not these Stars?



How to Use Your Star Chart

- ◎ Simply take your Star Chart when you go out at night and face the North Star
 - To find the North Star look between the two constellations called Cassiopeia and Ursa Major (Big Dipper)
- ◎ The North Star is a dim star, $\frac{1}{2}$ way between Cassiopeia and Ursa Major
- ◎ The North Star is also called Polaris Star.
- ◎ The Earth's Poles (north and south) revolve around the North Star every 24 hours

Following and Identifying Stars

- Following one Star leads to another and still another
- Following a group of Stars lead to a Constellation
- And a group of Stars lead to hidden Nebulas and Galaxies

Pleiades Open Star Cluster (M45)

- ⦿ Also called the Seven Sisters
- ⦿ Beautiful and Majestic and visible to us
- ⦿ 500 Stars in one small area
- ⦿ Distance is 440 light years or
- ⦿ 2,582,673,984,000,000 miles from Earth

Pleiades Open Star Cluster (M45)



Andromeda Spiral Galaxy (M31)

- 2.5 Million Light Years Away or
- 964,224,000,000,000,000 miles from Earth
- Visible as a smudge
- Farthest object from Earth that can be seen by the unaided eye
- Contains 1 Trillion Stars
- Like are Galaxy
- Closest Galaxy to us

Andromeda Spiral Galaxy (M31)



Planet Jupiter

- ⦿ 5th Planet from Our Sun
- ⦿ Largest Planet in Our Solar System
- ⦿ Third Brightest Object in the Night Sky
- ⦿ You can plainly see it in the Night Sky till March 2011
- ⦿ 63 Natural Satellites or Moons
- ⦿ 4 Large Moons – Ganyemedede, Io, Europa, Callisto – Visible with binoculars
- ⦿ You need a Telescope to see the Red Spot and Jupiter's Cloud Belts

Planet Jupiter



Thank You for Your Time

- ⦿ Any Questions?
- ⦿ Any Comments?
- ⦿ References to follow ...



Astronomy References

- ◉ Sky Maps, <http://skymaps.com>
- ◉ Efston Science, <http://www.escience.ca>
- ◉ Chapters / Indigo, <http://www.chapters.indigo.ca>
- ◉ Toronto Public Library,
<http://www.torontopubliclibrary.ca>
- ◉ Mississauga Library System,
<http://www.mississauga.ca/portal/residents/library>
- ◉ Royal Ontario Museum, <http://www.rom.on.ca>
- ◉ Ontario Science Centre,
<http://www.ontariosciencecentre.ca>
- ◉ Humber College Library